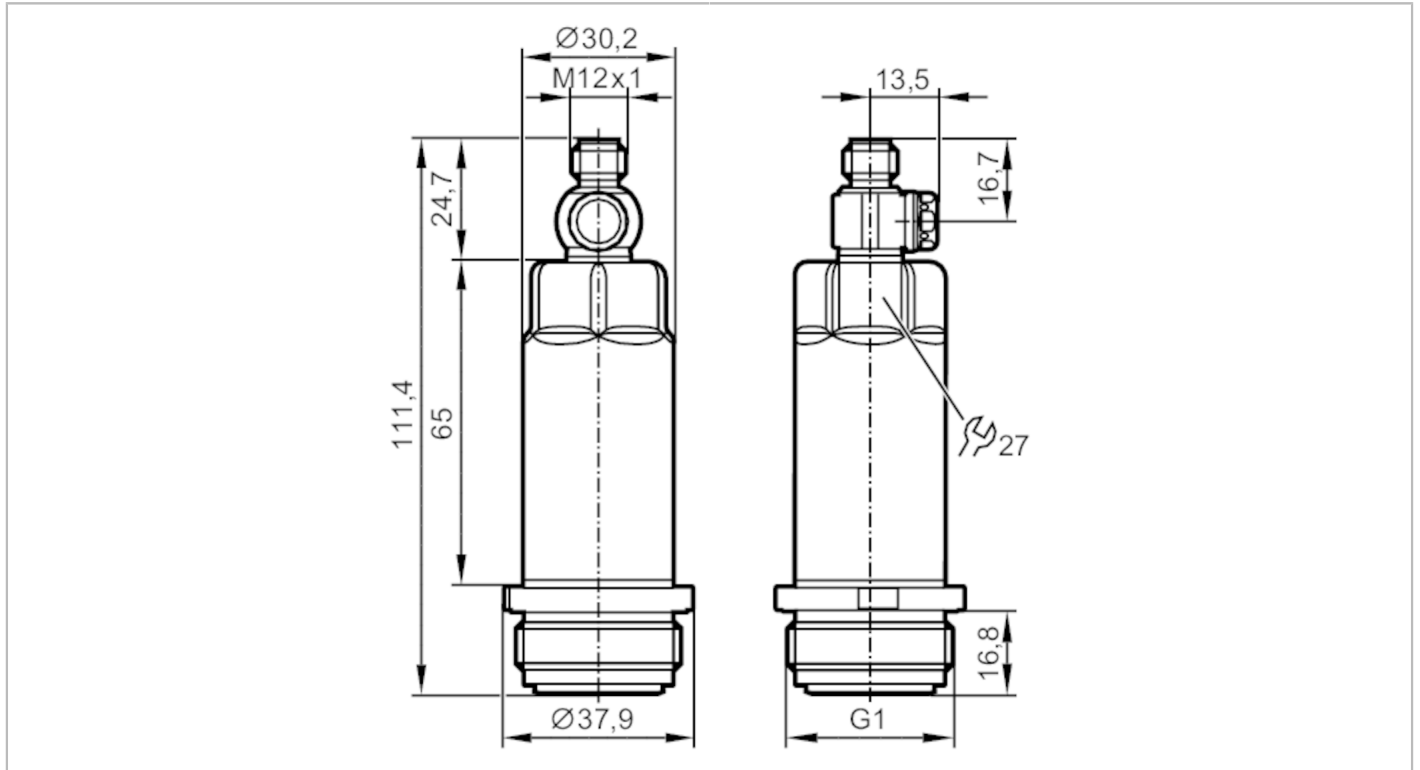


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Electronic pressure sensor

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Application

Measuring element	ceramic-capacitive pressure measuring cell		
Application	hygienic systems		
Media	viscous media and liquids with suspended particles; liquids and gases		
Medium temperature [°C]	-25...125; (150 max. 1h)		
Pressure rating	10000 mbar	145 psi	1000 kPa
Min. bursting pressure	30000 mbar	435 psi	3000 kPa
Vacuum resistance [mbar]	-1000		
Type of pressure	relative pressure		
No dead space	yes		
MAWP (for applications according to CRN) [bar]	10		

Electrical data

Operating voltage [V]	18...30 DC		
Min. insulation resistance [MΩ]	100; (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Integrated watchdog	yes		
2-wire			
Current consumption [mA]	3.5...21.5		
Power-on delay time [s]	1		

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3-wire	
Current consumption [mA]	< 45
Power-on delay time [s]	0.5
Inputs / outputs	
Number of inputs and outputs	Number of analogue outputs: 1
Outputs	
Total number of outputs	1
Output signal	analogue signal
Number of analogue outputs	1
Analogue current output [mA]	4...20; (scalable)
Max. load [Ω]	700; ($U_b = 24\text{ V}$; ($U_b - 9\text{ V}$) / 21.5 mA)
Short-circuit proof	yes
Overload protection	yes
Measuring/setting range	
Measuring range	-50...1000 mbar -0.73...14.5 psi -5...100 kPa
Analogue start point	-50...800 mbar -0.73...11.6 psi -5...80 kPa
Analogue end point	150...1000 mbar 2.18...14.5 psi 15...100 kPa
In steps of	0.5 mbar 0.01 psi 0.05 kPa
Factory setting	ASP = 0.0 mbar AEP = 1000 mbar
Accuracy / deviations	
Repeatability [% of the span]	< $\pm 0,1$; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation [% of the span]	< $\pm 0,2$ (nach DIN EN 61298-2); (incl. drift when overtightened, zero point and span error, non-linearity, hysteresis; Turn down 1:1)
Linearity deviation [% of the span]	< $\pm 0,15$; (Turn down 1:1)
Hysteresis deviation [% of the span]	< $\pm 0,15$; (Turn down 1:1)
Long-term stability [% of the span]	< $\pm 0,1$; (Turn down 1:1; per year)
Temperature coefficient zero point [% of the span / 10 K]	< $\pm 0,05$; (0...70 °C)
Temperature coefficient span [% of the span / 10 K]	< $\pm 0,15$; (0...70 °C)
Response times	
Damping for the analogue output dAA [s]	0...4
2-wire	
Step response time analogue output [ms]	30
3-wire	
Step response time analogue output [ms]	7

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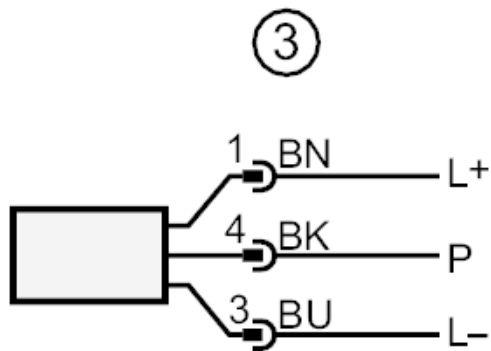
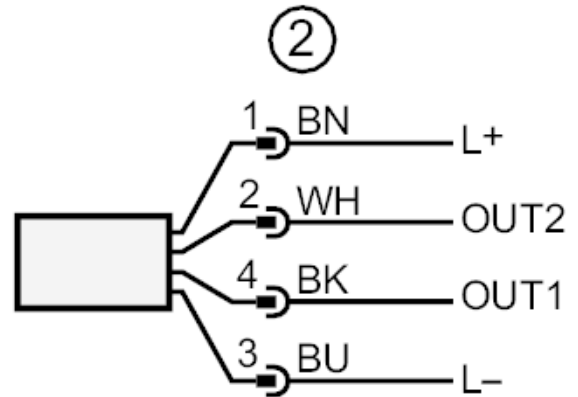
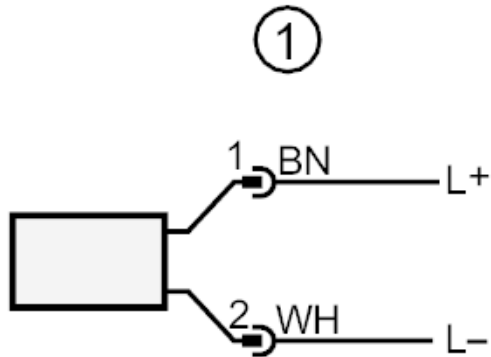
Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
IO-Link device ID	668 d / 00 02 9c h	
Profiles	Digital Measuring Sensor (0x000A), Identification and Diagnosis (0x4000)	
SIO mode	no	
Required master port type	A	
Process data analogue	3	
Min. process cycle time [ms]	3.2	
Operating conditions		
Ambient temperature [°C]	-25...80	
Storage temperature [°C]	-40...100	
Protection	IP 67; IP 68; IP 69K	
Tests / approvals		
EMC	DIN EN 61000-6-2	
	DIN EN 61000-6-3	
Shock resistance	DIN EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF [years]		323
UL approval	UL Approval no.	J021
Mechanical data		
Weight [g]		281.5
Materials	stainless steel (1.4404 / 316L); PBT	
Materials (wetted parts)	ceramics (99.9 % Al ₂ O ₃); PTFE; stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4	
Min. pressure cycles		100 million
Tightening torque [Nm]	35; (recommended tightening torque depends on lubrication, seal and pressure rating)	
Process connection	threaded connection G 1 external thread Aseptoflex Vario	
Displays / operating elements		
Display unit	mbar; psi; kPa; mWS; inH ₂ O	
Remarks		
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M12; Contacts: gold-plated		
		



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Connection



colours to DIN EN 60947-5-2

- 1 connection for 2-wire operation
- 2 connection for 3-wire operation
- 3 connection for IO-Link parameter setting (P = communication via IO-Link)

Core colours :

BK =	black
BN =	brown
BU =	blue
WH =	white